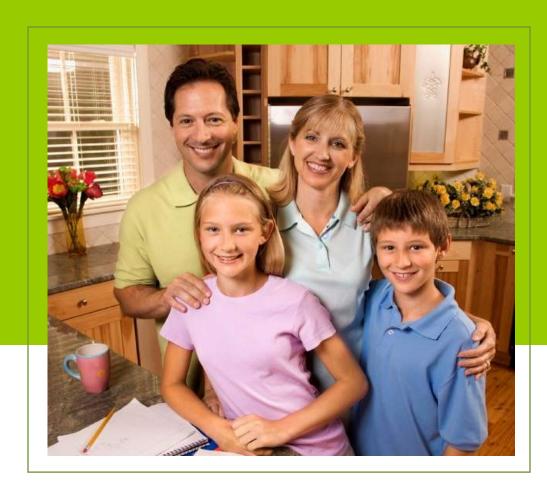
# **BRFSS**

# Behavioral Risk Factor Surveillance System



2008 Key Findings



Missouri Department of Health and Senior Services Division of Community and Public Health Office of Epidemiology

Margaret T. Donnelly, Director

# **ACKNOWLEDGEMENTS**

2008 Behavioral Risk Factor Surveillance System Key Findings

# Special Thanks:

Special thanks to more than 5,000 Missouri adults whose telephone numbers were randomly selected for participation in the 2008 Behavioral Risk Factor Surveillance System interview. This valuable information would not be available without their willingness to participate.

# Project Management:

Missouri Department of Health and Senior Services Office of Epidemiology

Janet Wilson, MEd, M.P.A., BRFSS Coordinator

Phone: (573) 526-6660

Email: Janet.Wilson@dhss.mo.gov

# Data Collection (Interviews):

University of Missouri-Columbia
Department of Health Management & Informatics
Health and Behavioral Risk Research Center
William T. Wells, Ph.D., Director
Al Browne, Operations Manager

# Report Layout:

Missouri Department of Health and Senior Services
Office of Community Health Information
Wanda Hogrefe, Information Support Coordinator

The U.S. Centers for Disease Control and Prevention (CDC) Behavioral Surveillance Branch supports state BRFSS programs by providing funding, primary data analysis and technical support.

Suggested Citation: 2008 Missouri Behavioral Risk Factor Surveillance System Key Findings. Jefferson City, MO: Missouri Department of Health and Senior Services. Office of Epidemiology. December 2009.

# Contents

Acknowledgements	2
Introduction	4
Key Findings	5
Overall Health Measures	5
Access to Health Care	5
Health Risk Behaviors	5
Current Cigarette Smoking	5
No Leisure Time Activity or Exercise	5
Heavy and Binge Alcohol Drinking	6
Drinking and Driving	6
Seatbelt Use	6
Inadequate Sleep	6
Falls	6
Preventive Practices	6
Diabetes Testing	6
Diabetes Management	6
Breast Cancer Screening	7
Cervical Cancer Screening	7_
Colorectal Cancer Screening	7
Prostate Cancer Screening	7
HIV Testing	7
Immunizations	7
Oral Health	7
Emotional Support and Life Satisfaction	8
Chronic Conditions and Diseases	8
Visual Impairment and Access to Eye Care	8
Childhood Asthma	9

# INTRODUCTION

The Missouri Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults age 18 and older that collects a range of information on health issues. BRFSS data are used to identify emerging health problems, establish health objectives and track their progress, and develop and evaluate public health policies and programs.

In 2008, 5,158 adults were interviewed January through December by the Health and Behavioral Risk Research Center at the University of Missouri-Columbia. Randomly selected household telephone numbers were called and an adult was randomly selected to participate in the survey. Data were aggregated and weighted by the U.S. Centers for Disease Control and Prevention to be representative of non-institutionalized adults in Missouri. This report summarizes key findings from the survey. Previous years of BRFSS data may be found in Annual Reports located on the Missouri Department of Health and Senior Services website at <a href="http://www.dhss.mo.gov/BRFSS/Data.html">http://www.dhss.mo.gov/BRFSS/Data.html</a>.

The 2008 BRFSS revealed the following health concerns or risks among Missouri adults:

- 36.4% were overweight
- 29.1% were obese
- 27.6% were physically inactive
- 27.0% had not been to a dentist for two or more years
- 26.9% did not always use a seat belt when driving or riding in a car
- 25.0% smoked cigarettes
- 20.7% of males engaged in binge drinking of alcohol
- 17.4% of adults age 18-64 did not have health care coverage
- 16.8% did not get enough sleep on 21 or more of the past 30 days
- 15.9% did not see a doctor when needed in the past 12 months due to cost
- 9.1% had diabetes

In general, a consistent finding throughout the study is that adults that have the lowest annual household incomes compared to those with the highest incomes were less healthy, engaged in health risk behaviors to a greater extent, had less health care coverage, and practiced preventive measures to a lesser degree.

# **KEY FINDINGS**

# **Overall Health Measures**

Most Missouri adults (83.1 percent) reported excellent, very good or good general health while 16.9 percent said their health was fair or poor. Almost one-quarter of adults (24.9 percent) experienced poor physical health on three or more of the past 30 days and 26.3 percent said their mental health was not good three or more days of the past 30 days. Twenty-eight percent (28.0 percent) of adults were kept from doing their usual activities on three or more of the past 30 days due to poor physical or mental health.

## **Access to Health Care**

Among adults age 18 to 64, 17.4 percent reported having no health care coverage. Significantly more males age 18 to 64 (20.7 percent) had no health care coverage compared to females (14.2 percent). Significantly more adults age 18 to 64 with annual household incomes less than \$35,000 had no health care coverage compared to those with household incomes more than \$35,000. Forty-five percent (45.4 percent) of those with household incomes less than \$15,000, 42.7 percent of those \$15,000-\$24,999, and 31.3 percent of those \$25,000-\$34,999 had no health care coverage.

Almost 16 percent (15.9 percent) of adults said they needed to see a doctor in the past 12 months but could not because of cost. Significantly more African-American adults (26 percent) than white adults (14.6 percent) could not see a doctor due to cost. Significantly more adults with annual household incomes of less than \$35,000 did not see a doctor due to cost compared to those with household incomes of more than \$35,000 annually. Twenty percent (20.8 percent) of adults had not seen a doctor for a routine checkup in two or more years. Two percent (2.0 percent) had never seen a doctor for a checkup.

#### **Health Risk Behaviors**

#### Current Cigarette Smoking

Twenty-five percent (25.0 percent) of Missouri adults reported smoking cigarettes everyday or some days. Significantly more adults with household incomes less than \$15,000 annually (44.7 percent) and \$15,000-\$24,999 (37.9 percent) smoke compared to those with household incomes of \$35,000-\$49,999 (24.9 percent), \$50,000-\$74,999 (20.3 percent), and \$75,000 or more (14.2 percent). One-half (53.9 percent) of current smokers stopped smoking for one day or longer in the past 12 months. Significantly more African-American adults (75.8 percent) than white adults (52.3 percent) tried to stop smoking in the past year.

#### No Leisure Time Activity or Exercise

More than one quarter (27.6 percent) of Missouri adults participated in no leisure time physical activity or exercise in the past month. Significantly more females (31.1 percent) than males (23.8 percent), and African-Americans (37.3 percent) than whites (26.8 percent) were physically inactive. Significantly more adults with annual household incomes less than \$25,000 (\$15,000 or less, 42.9 percent; \$15,000-\$24,999, 35.5 percent) were physically inactive compared to adults with household incomes of \$35,000 or more (\$35,000-\$49,999, 26.1 percent; \$50,000-\$74,999, 27.2 percent; and \$75,000 or more, 14.7 percent).

# Heavy and Binge Alcohol Drinking

Five percent (5.4 percent) were considered heavy drinkers as defined by males having more than two drinks per day and females having more than one drink. There was no significant difference between males (5.5 percent) and females (5.3 percent) engaging in heavy drinking. Significantly more males (20.7 percent) than females (10.3 percent) had engaged in binge drinking on an occasion during the past month. Binge drinking for males is defined as five or more drinks on one occasion and four or more drinks for females.

# Drinking and Driving

Almost 4 percent (3.6 percent) of adults said that in the past 30 days they had driven one or more times after having too much to drink.

#### Seatbelt Use

More than one quarter (26.9 percent) reported not always wearing a seat belt when driving or riding in a car. Seventy-three percent (73.1 percent) said they always wear a seat belt, 15.4 percent nearly always wear a seat belt and 11.4 percent wear a seat belt sometimes, seldom or never.

# Inadequate Sleep

Almost 70 percent (68.9 percent) reported not getting enough rest or sleep on two or more of the past 30 days, including 16.8 percent that said they did not get enough sleep on 21 or more days. Significantly more adults with household incomes of less than \$15,000 annually (29.2 percent) said they did not get enough sleep on 21 or more of the past 30 days compared to those with household incomes of \$25,000-\$34,999 (16.6 percent), \$35,000-\$49,999 (17.2 percent), \$50,000-\$74,999 (15.2 percent), and \$75,000 or more (13.7 percent).

#### Falls

Among adults age 45 and older, 18.0 percent had fallen one or more times in the past three months. Thirty-six percent (36.3 percent) of the falls resulted in an injury that caused the respondent to limit their regular activities for at least a day or to go see a doctor.

### **Preventive Practices**

#### Diabetes Testing

Fifty-five percent (55.8 percent) of Missouri adults that had never been told by a doctor they had diabetes had a test for high blood sugar or diabetes within the past 3 years.

# Diabetes Management

Among adults with diabetes:

- 32.8% were taking insulin
- 67.6% checked their blood for glucose or sugar one or more times per day
- 45.0% had seen a doctor for their diabetes four or times in the past 12 months, 41.8 percent had seen a doctor one-to-three times and 13.2 percent had not seen a doctor at all in the past 12 months
- 44.5% had an "A One C" test three or more times in the past 12 months, 39.9% were tested one-to-two times, and 15.6% had never had the test or heard of the test
- 70.3% had a health professional check their feet for sores or irritations one more times in the past 12 months and 29.7% had not had their feet checked by a health professional at
- 64.4% had an eye exam in which their pupils were dilated within the past 12 months and 26.8% had the exam one or more years ago

- 15.8% had been told by a doctor that diabetes had affected their eyes or that they had retinopathy
- 57.5% had taken a course or class on how to manage their diabetes

# Breast Cancer Screening

Among females age 40 and older, 73.5 percent had a mammogram in the past two years. Significantly fewer women with less than \$15,000 annual household income (59.8 percent) had a mammogram in the past two years than women with household incomes of \$35,000-\$49,999 (77.4 percent), \$50,000-\$74,999 (76.5 percent) and \$75,000 or more (83.3 percent).

# Cervical Cancer Screening

Over 80 percent (82.9 percent) of females age 18 and older reported they had had a pap test in the past three years. Significantly fewer females with household incomes less than \$25,000 had a pap test in the past three years compared to females with household incomes of \$50,000 or more (less than \$15,000, 71.7 percent, \$15,000-\$24,999, 74.6 percent compared to \$50,000-\$74,999, 90.5 percent, and \$75,000+, 93.6 percent).

### Colorectal Cancer Screening

Sixteen percent (16.9 percent) of adults age 50 and older had a blood stool test using a home kit within the past two years. Sixty-one percent (61.4 percent) ever had at least one sigmoidoscopy or colonoscopy exam. Significantly more adults with household incomes of \$75,000 and more (70.1 percent) ever had one of the exams compared to adults with household incomes of \$15,000 or less (51.3 percent) and \$15,000-\$24,999 (53.7 percent). About 5 percent (4.7 percent) of adults age 50 and older had one of the exams 10 or more years ago. Among those that had one of the exams, 94.8 percent had a colonoscopy.

#### Prostate Cancer Screening

Over one-half (54.6 percent) of men age 40 and older had a Prostate-Specific Antigen (PSA) test in the past two years. Sixty-five percent (65.3 percent) had a digital rectal exam (DRE) within the past two years.

### HIV Testing

Thirty-four percent (34.1 percent) of adults age 18-64 had ever been tested for HIV. Significantly more African-American adults (63.7 percent) than white adults (30.8 percent) had been tested. Significantly more adults with annual household incomes of less than \$15,000 (56.2 percent) and \$15,000-\$24,999 (44.6 percent) had been tested compared to adults with household incomes of \$35,000-\$49,999 (27.6 percent), \$50,000-\$74,999 (32.9 percent) and \$75,000 or more (31.9 percent).

#### *Immunizations*

Almost forty percent (39.2 percent) of adults had a flu shot within the past year. Significantly more females (42.1 percent) than males (36.1 percent) had had a flu shot. Seventy-one percent (71.3 percent) of adults aged 65 and older had a flu shot within the past year. Also among adults age 65 and older, 67.7 percent had ever had a pneumonia vaccination.

# Oral Health

Sixty percent (61.1 percent) of Missouri adults had last visited a dentist within the past 12 months, 11.5 percent had seen a dentist between one and two years ago, 12.4 percent had done so between two and five years ago and 14.6 percent had last seen a dentist five or more years ago. Significantly more adults with annual household incomes of less than \$25,000 annually had last seen a dentist five or more years ago compared to those with household incomes of \$25,000 or more. One-third (33.6 percent) of adults with household incomes of less than \$15,000 annually and 29.0 percent of adults with household incomes of \$15,000-\$24,999 had last seen a dentist five or more years ago. Over 60 percent (61.6 percent) of

Missouri adults last had their teeth cleaned by a dentist or hygienist within the past year, 36.7 percent had their teeth cleaned one or more years ago, and 1.7 percent had never had their teeth cleaned. Almost half (49.4 percent) of adults had had one or more teeth removed due to decay, gum disease or infection, including 7.9 percent that had all their teeth removed.

## Emotional Support and Life Satisfaction

Eighty percent (80.1 percent) of adults said they always or usually get the social and emotional support needed. Significantly more adults with annual household incomes of \$50,000 and greater reported always receiving the support needed compared to those with household incomes of less than \$25,000. Ninety-four percent (94.1 percent) of all adults said they were very satisfied or satisfied with their life. Significantly more white adults (43.8 percent) than African-American adults (30.6 percent) were very satisfied with their life. Significantly more adults with annual household incomes of \$75,000 or more were very satisfied with their lives than those with household incomes of less than \$50,000.

## **Chronic Conditions and Diseases**

Missouri adults reported having the following chronic diseases and conditions:

- Asthma 8.4% Significantly more females (10.0%) than males (6.7%) and adults with household incomes of \$15,000 or less annually (16.0%) than those with household incomes of \$35,000 - \$49,999 (8.4%)
- Diabetes 9.1% Significantly more adults (37.2%) were told they had diabetes when they were 46-60 years old compared to any other age group
- Pre-diabetes or borderline diabetes 7.6%
- Obesity 29.1%
   Significantly more with household incomes of \$15,000 or less (36.9%) than those with household incomes of \$75,000 or more (25.8%)
- Overweight 36.4% Significantly more males (43.3%) than females (29.9%)
- Heart Attack 5.3% Significantly more males (6.6%) than females (4.2%)
- Coronary Heart Disease 5.0% Significantly more males (6.5%) than females (3.6%)
- Stroke 3.4%
- Prostate cancer among men age 40 and older 3.3%

### Visual Impairment and Access to Eye Care

- 4.5% reported moderate or extreme difficulty in recognizing a friend across the street and 1.2% were unable to recognize a friend due to eyesight
- 17.7% had moderate or extreme difficulty reading print in a newspaper, magazine, recipe, menu or numbers on the telephone and 1.6% were unable to due to eyesight
- 56.9% had an eye examination by a doctor or eye care provider within the past 12 months, 41.0% had an exam one or more years ago, and 2.0% had never had an exam
- Among those that had not visited an eye care professional in the past 12 months, 57.3% had no reason to go or hadn't thought of it, 24.4% did not go due to cost or lack of insurance, 18.4% did not go for other reasons
- 40.6% had an eye exam in which the pupils were dilated within the past 12 months, 44.7% had the exam one or more years ago, and 14.8% had never had a dilated eye exam

- 44.0% had no health insurance coverage for eye care Significantly fewer adults with annual household incomes of \$35,000 or less had insurance coverage compared to those with household incomes of \$35,000 or more
- 13.7% had been told by a doctor they had cataracts and 11.3% had had cataracts removed
- 4% had been told by a doctor they had glaucoma
- 3.9% had been told by a doctor they had age-related macular degeneration

# **Childhood Asthma**

Included in the 2008 BRFSS interview were questions concerning childhood asthma. Adults with children under the age of 18 were asked to answer questions about a randomly selected child in the household. Responses were weighted to be representative of all children in Missouri under the age of 18. As a result, it was found that 14.4 percent of children under the age of 18 in Missouri had been told by a doctor or other health professional that they had asthma. Among those that had been told they had asthma, 70.2 percent still had the condition.